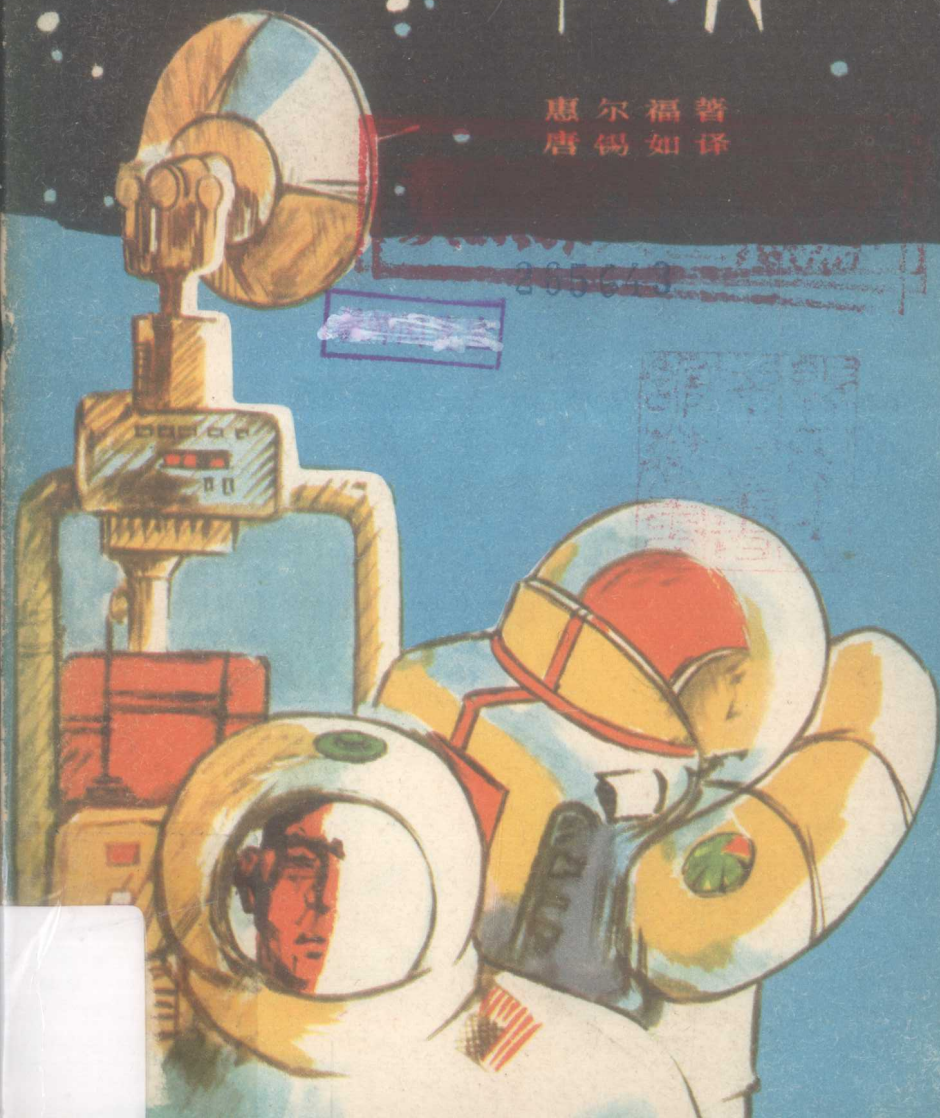


我们到了月球

惠尔福著
唐锡如译

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We Reach
the Moon

月球到了我们



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CHAPTER 1

FOOTPRINTS ON THE MOON

On the lonely, lifeless landscape of the moon, a strange-looking vehicle squats motionless under the sun's glaring rays. On one of its four spindly legs is attached a small, stainless steel plaque which reads:

HERE MEN FROM THE PLANET EARTH

FIRST SET FOOT UPON THE MOON.

JULY 1969 A.D.

WE CAME IN PEACE FOR ALL MANKIND.

The vehicle, the cast-off lower half of a lunar landing craft, is a monument to the historic event on July 20, when two American astronauts planted the first human footsteps on the moon. The monument will stay there for ages, for there is no wind or water on the moon to wear it away.

第 一 章

月球上的脚印

在一片荒凉、全无生气的月球景色里，有架奇形怪状的飞行器，在耀目阳光下一动不动的停着。它的四条细长支脚，有一条镶着一块不锈钢的小牌，上边写着：

公元一九六九年七月

地球行星上人类

在此首次踏上月球

我们代表全人类和平来此

这架飞行器，一艘登月艇抛棄的下半截，是七月二十日历史事件的一座纪念碑，那天有两名美国宇宙航员，第一次将人类足跡印到月球上。这座纪念碑会留 在 那 里 很久，因为月球上没有风和水把它磨灭。

Footprints on the Moon

The man who took the first step was Neil A. Armstrong, the 38-year-old civilian commander of the Apollo 11. As he reached the bottom of the landing craft's ladder and extended his booted left foot to touch the moon's powdery surface, he said: "That's one small step for a man, one giant leap for mankind."

He was followed down the ladder minutes later by Edwin E. Aldrin, Jr., a 39-year-old Air Force colonel. For 2 hours and 21 minutes, the two men, carefully at first and then boldly, wandered about on the barren, rock-strewn surface. They tested their ability to move about on this strange world. They took photographs of the landscape. They set up scientific experiments and collected rock and soil samples. They set up a television camera so the whole world could watch. At one point, Armstrong said to Aldrin, "Isn't this fun?"

All the while, the third member of the crew, Michael Collins, 38, an Air Force lieutenant colonel, piloted the Command Ship in lunar orbit 70 miles above the surface, waiting for the two explorers to rejoin him for the trip back to earth. Altogether, the visit to the moon lasted 21 hours and 37 minutes.

AN INCREDIBLE TRIUMPH

For the Apollo 11 crew, and for the United States space team, the successful 500,000-mile mission involving 88 separate steps was an incredible triumph of skill and courage. For the world, it

第一个踏上月球的人，是太阳神十一号驾驶长，三十八岁的尼尔·A·杭思朗。当他走到登月艇梯子最下一级，伸出他着上靴子的左脚，要碰到月球粉状的月面时，他说：“对一个人来说，这是一小步，但对人类来说，这是跨了一大步。”

小埃德云·E·艾德灵，一名三十九岁的空军上校，在几分钟之后也跟着走下梯子。两个人，起初小心翼翼，后来放大了胆，在不毛的、乱石散布的月球面上漫游了两小时又二十一分钟。他们在这个奇怪的世界里，试验他们动来动去的能力。他们拍摄月球上景色。他们装置科学实验仪器，蒐集岩石和土壤标本。他们安置一架电视摄影机，使全世界都可以看到。有一次，杭思朗对艾德灵说，“这不是很好玩吗？”

第三个驾驶员，迈克尔·柯林斯，一名三十八岁的空军中校，则始终驾驶着指挥船在月面上空七十哩处环绕月球运行，等待两位探险家和他会合，重返地球。这次访问月球一共继续了二十一小时又三十七分。

惊人的大成功

对太阳神十一号的驾驶员来说，也是对美国太空工作人员来说，这项包含八十八种各别步骤的五十万哩飞行，是技能和勇气的一种惊人大成功。对全世界人士来说，那

Footprints on the Moon

was the most dramatic proof of what man can do if he puts his mind to it. The moon, which used to seem unreachable, was now within man's reach, the first port of call in the new age of space-faring.

There have been other daring expeditions, of course. But Apollo 11 was different: the world watched it as it happened. Through television and radio, hundreds of millions of people followed the activities aboard Columbia, the command ship, and Eagle, the landing craft — names chosen because, as Armstrong put it, they were “representative of the flight and the nation's hope.” The television pictures across the 238,000 miles from the moon were so clear and sharp, showing the deep shadows and bright sunlight, that they seemed almost unreal.

Though the mission was completed almost without flaw, it was filled with suspense and anxiety. The astronauts faced risks on the moon never before met by man. And, as with all space flights, chances of failure and disaster were ever present — the blast-off of the giant Saturn 5 rocket at Cape Kennedy, the entry of the spaceship into earth and lunar orbits, the never-before-attempted landing and lift-off from the moon, the link-up of Columbia and Eagle, the re-entry into the atmosphere, the splash-down. An error or failure of any of the millions of individual parts anywhere along the way could have ended the mission short of the goal. An equipment failure or accident on the moon could have left the astronauts stranded.

是《有志者，事竟成》给人印象最深刻的证据。一向看来无法到达的月球，现在人类已能到达了，是太空飞航新时代中的第一个停靠处。

当然还有其他勇敢的探险。不过太阳神十一号是不同的；它探险时全世界都在注视它。几亿人从电视和无线电，追着看追着听指挥船《哥伦比亚》号和登月艇《鹰》号上的活动——所以选用这两个名字，就象杭思朗所说的，那是因为它们足以代表《那次飞航和国家的希望。》从二十三万八千哩外月球传来的电视照片那么清晰和鲜明，显示出阴暗的黑影和明亮的阳光，看上去有些疑真疑幻。

这次任务虽则差不多圆满完成，它曾使人充满焦虑和担忧。宇宙航员在月球上所冒的危险，是人类以前从来没有遇见的。所有太空飞行，失败和灾难的可能性是永远存在的——象庞然大物的土星五号火箭在肯尼角升发，宇宙飞船进入地球和月球轨道，从来没有试过的降落月球和从月球起飞，哥伦比亚号和鹰号的啣接，重入大气层，降落海洋。几百万件零件中，要是有一件在路上出了毛病或者失灵，任务便无法达成。在月球上如果有一种设备失灵或出事，会使宇宙航员进退失据。

HEROES

But they made it. After eight days in space, they splashed down in the Pacific to a presidential greeting aboard the recovery carrier, the U.S.S. Hornet. They were the heroes of the nation and the world.

"This is the greatest week in the history of the world since the Creation," President Nixon told the space travelers. "As a result of what you've done, the world has never been closer together before."

The welcome was not the familiar red-carpet ceremony of space missions in which the returning astronauts walk across the deck of the carrier. The Apollo 11 crewmen were inside an isolation van and they talked with Mr. Nixon by microphone. The astronauts were under quarantine because of the slim chance that they brought back some deadly moon virus for which man has no immunity.

People everywhere were excited by this moon trip. Perhaps never before had one event so captured the world's imagination and spirit of adventure. There were some grumbles about problems to be solved here on earth, but for days Apollo was all over the headlines, TV sets, and radios throughout the world.

What moved the human spirit was, as Aldrin put it in a thoughtful moment on the way home, the "curiosity of all mankind to explore the unknown" that had sent explorers to brave the

英雄人物

可是他们完成了任务。在太空八天以后，他们降落太平洋，在打捞的航空母舰大黄蜂号上，接受总统的祝贺。他们成为国家的和世界上的英雄人物。

尼克松总统告诉这几位太空旅行家：“这是创世以来世界史上最伟大的一周。由于你们尽力的结果，世人从没有象现在这么接近过。”

这次欢迎，用的不是那种习见的隆重仪式，由胜利归来的宇宙航员从航空母舰甲板上走过。太阳神十一号的飞航员要留在一辆隔离车里，他们用扩音器和尼克松总统谈话。宇宙飞行员所以要受隔离，那是因为他们会有带回某种人类没有免疫性的月球致命性病毒的可能性。

这次月球旅行，使世界各地人士都振奋起来。以前大概从来没有一件事，会那么吸引世界人士的想象力和冒险精神。也曾有人发过牢骚说，地球上还有许多问题没有解决，不过在太阳神飞月那几天，它成了全世界报纸、电视和无线电的首要新闻。

一如艾德灵在归途中深思时所说的，使人满怀大志的是，《全人类要探查未知事物的好奇心》，使探险家甘冒

Footprints on the Moon

harshest conditions of this planet — to the poles, to the tops of mountains, to the loftiest balloon altitudes, to the deepest portions of the sea. Then why not the moon?

There were critics who said that the Apollo program cost too much, that the money and talent could be more usefully directed to fighting disease and poverty, that it was a “childish stunt” to make a race out of going to the moon. But by the time of the moon trip, many people began to think that the astronauts might bring back some clues to help solve the mysteries of the universe.

Whatever would be learned from the Apollo¹¹ voyage, it was a great expansion for mankind. It was a journey that took man beyond the earth to walk on another world.

地球上最严酷条件——到南北极去，到高峯上去，到最高的汽球高度，到海洋中最深部分。那么为什么不到月球去？

有人抨击太阳神计划化钱太多，说这些金钱和人才用在消灭疾病和贫穷上当更有益，又说作登月竞赛是一种《傻气的花式飞行。》可是到了登月时，许多人开始想宇宙航员可能会带回帮助解决宇宙之谜的若干线索。

无论从太阳神十一号飞行可以明白什么东西，这是人类的一大发展。这是将人类带到地球以外，到另一星球上去行走的一次旅行。

CHAPTER 2

THE TARGET

By the time the Apollo 11 astronauts began preparing for their lunar voyage, scientists had gathered enormous amounts of data about the moon. For thousands of years astronomers have been looking at the moon, studying its appearance and its motion through the sky. For the past 360 years, detailed views of the moon have been made possible through the use of telescopes. More recently, we have been able to reflect radar signals from the moon and to send scientific instruments to the moon on unmanned rockets. Radar signals and rockets able to travel through outer space are the products of our fast-moving scientific age, and they have shown us things about the moon that could never have been known before.

第 二 章

目 标

到太阳神十一号的宇宙航员开始准备作月球飞航时，科学家已蒐集到大量有关月球的资料了。几千年来，天文学家一直观察着月球，研究它的外观和它在天空的运行情形。在过去三百六十年，因为使用望远镜，已能对月球作详细观察。最近，我们能够从月球反射雷达讯号，和用无人驾驶火箭将科学仪器送到月球上去。能够进入外太空的雷达讯号和火箭，是我们行动飞速的科学时代的产物。它们已将以前永远不会知道的有关月球的东西给我们看了。